

AZ7555

20 AMP MINIATURE POWER RELAY

FEATURES

- Dielectric strength 5000Vrms
- Low cost
- Epoxy sealed version available
- 20 Amp switching — single pole contacts
- 5.0mm terminal spacing
- Class F insulation system available
- UL, CUR file E44211
- TUV R50290835



CONTACTS

Arrangement	SPST (1 Form A) SPDT (1 Form C)
Ratings	Resistive load: Max. switched power: 480W or 5kVA Max. switched current: 20A Max. switched voltage: 30VDC* or 277VAC *Note: If switching voltage is greater than 30VDC, special precautions must be taken. Please contact the factory.
Rated Load UL, CUR	Normally Open Contacts (N.O.) Std & Sen. Coil 20A at 125VAC, Resistive, 100k cycles, 85°C 20A at 250VAC, General Use, 6k cycles, 40°C 16A at 250VAC, Resistive, 100k cycles, 85°C 16.7A at 250VAC, Resistive, 100K cycles (F Class only) 16A at 30VDC, Resistive, 100k cycles, 85°C 1/6 HP at 250 VAC, 100k cycles, 85°C Normally Closed Contacts (N.C.) Std & Sen. Coil 10A at 125VAC, Resistive, 100k cycles, 85°C 8A at 250VAC, Resistive, 100k cycles, 85°C 8A at 30VDC, Resistive, 100k cycles, 85°C Super Sensitive Coil Only 15A@150VAC inductive (General Use 85°C 0.75-0.8pf) NO 15A@277VAC/30VDC resistive 85°C NO and NC 480VA@240/277VAC pilot duty NO and NC 480VA@277VAC standard (magnetic) ballast NO and NC 600W@120VAC Tungsten NO 240W@120VAC Tungsten NC 1/3hp@120/240VAC NO 1/6hp@120/240VAC NC 1/4hp@277VAC NO 1/8hp@277VAC NC
TUV	5A NO / 3A NC @ 250VAC / 30VDC, 100k cycles, 85°C 10A NO / 5A NC @ 250VAC / 30VDC, 100k cycles, 85°C 16A NO / 8A NC @ 250VAC / 30VDC, 100k cycles, 85°C
Material	Silver tin oxide
Resistance	< 100 milliohms initially

NOTES

1. All values at 23°C (73.4°F).
2. Relay may pull in with less than "Must Operate" value.
3. Specifications subject to change without notice.

GENERAL DATA

Life Expectancy Mechanical Electrical	Minimum operations 1 x 10 ⁷ 1 x 10 ⁵ at 20A, 125VAC Res.
Operate Time (max)	15ms at nominal coil voltage (standard) 20ms at nominal coil voltage (sensitive)
Release Time (max)	8ms at nominal coil voltage (with no coil suppression)
Dielectric Strength (at sea level for 1 min.)	5000VAC contact to coil 1000VAC between open contacts 2500VAC between contact sets 10,000V surge contact to coil
Insulation Resistance	1000 megohms min. at 20°C, 500 VDC
Dropout	Greater than 10% of nominal coil voltage
Ambient Temperature Operating Storage	At nominal coil voltage -40°C (-40°F) to 85°C (185°F) -40°C (-40°F) to 105°C (221°F)
Vibration	0.059" DA at 10–55 Hz
Shock Mechanical Operational	100 g 10 g
Enclosure	P.B.T. polyester
Terminals	Tinned copper alloy, P.C.
Max. Solder Temp.	270°C (518°F)
Max. Solder Time	5 seconds
Max. Solvent Temp.	80°C (176°F)
Max. Immersion Time	30 seconds
Weight	13 grams

COIL

Power At Pickup Voltage (typical)	353mW (standard) 300mW (sensitive) 67.5mW (super sensitive)
Max. Continuous Dissipation	1.2W at 20°C (68°F) ambient (Standard) 0.9W at 20°C (68°F) ambient (Sensitive) 0.2W at 20°C (68°F) ambient (S. Sensitive)
Temperature Rise	40° C (104°F) at nominal voltage
Temperature	Max. 105°C (221°F) Max. 155°C (311°F) Class F

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RELAY ORDERING DATA

COIL SPECIFICATIONS (STANDARD)				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance	Form A (SPST)	Form C (SPDT)
3	2.1	3.9	13 ±10%	AZ7555-1A-3DK	AZ7555-1C-3DK
5	3.5	6.5	36 ±10%	AZ7555-1A-5DK	AZ7555-1C-5DK
6	4.2	7.8	48.5 ±10%	AZ7555-1A-6DK	AZ7555-1C-6DK
9	6.3	11.7	115 ±10%	AZ7555-1A-9DK	AZ7555-1C-9DK
12	8.4	15.6	200 ±10%	AZ7555-1A-12DK	AZ7555-1C-12DK
18	12.6	23.4	450 ±10%	AZ7555-1A-18DK	AZ7555-1C-18DK
24	16.8	31.2	820 ±10%	AZ7555-1A-24DK	AZ7555-1C-24DK
48	33.6	62.4	3,300 ±10%	AZ7555-1A-48DK	AZ7555-1C-48DK
60	45.0	78.0	5,000 ± 10%	AZ7555-1A-60DK	AZ7555-1C-60DK
110	82.5	143.0	16,000 ± 10%	AZ7555-1A-110DK	AZ7555-1C-110DK

For epoxy seal add 'E' after "DK". For Class F insulation system add suffix "F" to part number.

COIL SPECIFICATIONS (SENSITIVE)				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance	Form A (SPST)	Form C (SPDT)
3	2.25	3.9	17 ±10%	AZ7555-1A-3DSK	AZ7555-1C-3DSK
5	3.75	6.5	48.5 ±10%	AZ7555-1A-5DSK	AZ7555-1C-5DSK
6	4.5	7.8	68 ±10%	AZ7555-1A-6DSK	AZ7555-1C-6DSK
9	6.75	11.7	155 ±10%	AZ7555-1A-9DSK	AZ7555-1C-9DSK
12	9	15.6	270 ±10%	AZ7555-1A-12DSK	AZ7555-1C-12DSK
18	13.5	23.4	600 ±10%	AZ7555-1A-18DSK	AZ7555-1C-18DSK
24	18	31.2	1100 ±10%	AZ7555-1A-24DSK	AZ7555-1C-24DSK
48	36	62.4	4400 ±10%	AZ7555-1A-48DSK	AZ7555-1C-48DSK
60	45.0	78.0	6,670 ± 10%	AZ7555-1A-60DSK	AZ7555-1C-60DSK
110	82.5	143.0	22,400 ± 10%	AZ7555-1A-110DSK	AZ7555-1C-110DSK

* For epoxy seal add 'E' after "DSK". For Class F insulation system add suffix "F" to part number.

COIL SPECIFICATIONS (SUPER SENSITIVE)				ORDER NUMBER*	
Nominal Coil VDC	Must Operate VDC	Max. Continuous VDC	Coil Resistance	Form A (SPST)	Form C (SPDT)
5	3.75	6.5	208 ±10%	AZ7555-1A-5DSSK	AZ7555-1C-5DSSK
6	4.5	7.8	300 ±10%	AZ7555-1A-6DSSK	AZ7555-1C-6DSSK
9	6.75	11.7	675 ±10%	AZ7555-1A-9DSSK	AZ7555-1C-9DSSK
12	9	15.6	1,200 ±10%	AZ7555-1A-12DSSK	AZ7555-1C-12DSSK
18	13.5	23.4	2,700 ±10%	AZ7555-1A-18DSSK	AZ7555-1C-18DSSK
24	18	31.2	4,800 ±10%	AZ7555-1A-24DSSK	AZ7555-1C-24DSSK
48	36	62.4	19,200 ±10%	AZ7555-1A-48DSSK	AZ7555-1C-48DSSK
60	45.0	78.0	30,000 ± 10%	AZ7555-1A-60DSSK	AZ7555-1C-60DSSK

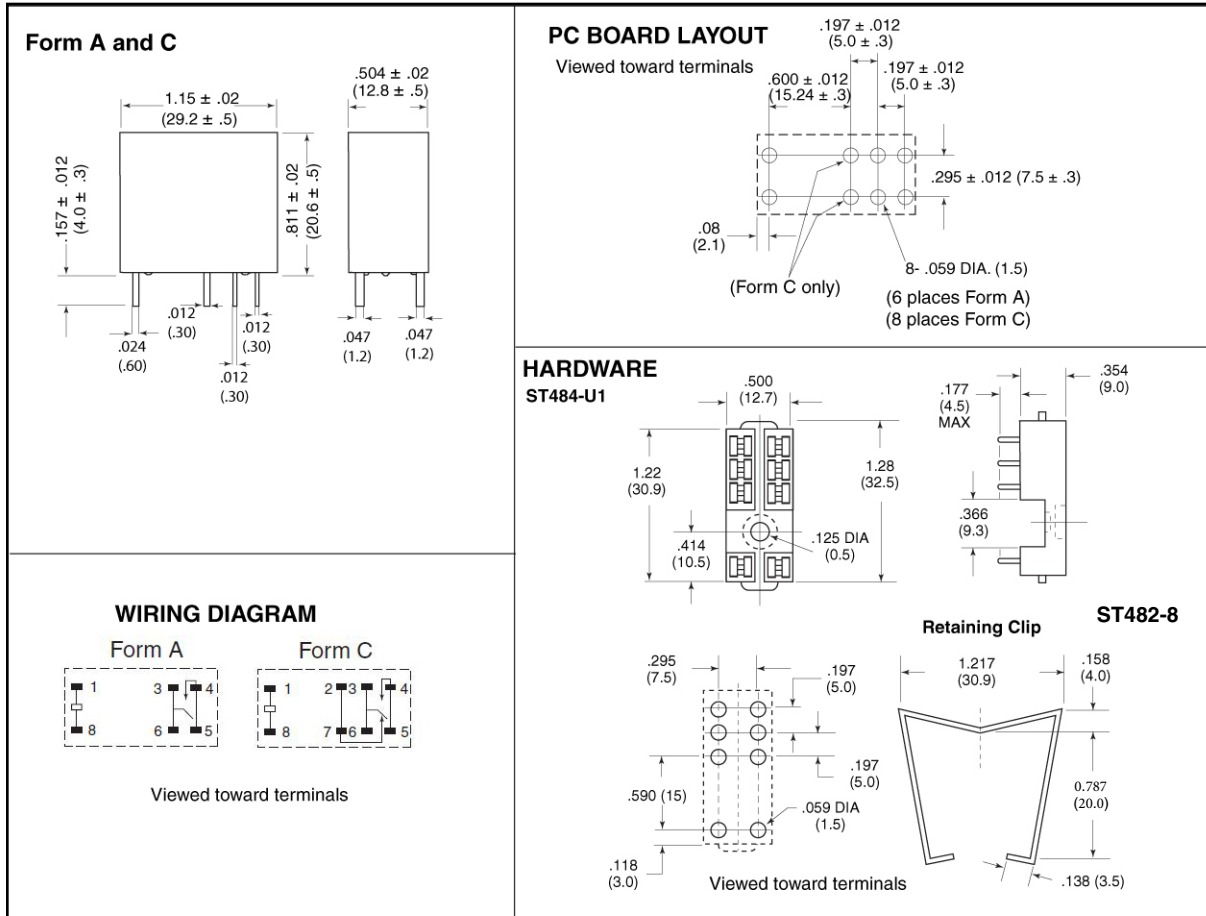
* For epoxy seal add 'E' after "DSSK". For Class F insulation system add suffix "F" to part number.

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HARDWARE ORDERING DATA

DESCRIPTION	ORDER NUMBER	DESCRIPTION	ORDER NUMBER
Socket (5.0mm)	ST484-U1	Retainer	ST482-8

MECHANICAL DATA



Dimensions in inches with metric equivalents in parentheses. Tolerance: $\pm .010$ " unless specified.

*ST482-8 - Contact Zettler for ordering details.